EXECUTIVE DIRECTIVE No. 2001 - 5 (ELECTRONIC COPY)

STATE FLOOD HAZARD MITIGATION

DATE: September 11, 2001

TO: All Directors and Agency Heads

FROM: Governor John Engler (signed)

SUBJECT: State Flood Hazard Mitigation

Recent flood events in Michigan are serious reminders that economic losses from flood damage can occur regardless of season and in spite of the current low Great Lakes water levels. Last September's flooding in southeast Michigan resulted in the most expensive Presidential Disaster Declaration in the history of the state of Michigan. The federal and state governments have expended more than \$200 million responding to this flood event.

The state of Michigan has extensive and continuous programs for the construction of buildings, roads and other facilities, which influence patterns of commercial, residential and industrial development in flood-prone areas. State agencies play an important role in avoiding the uneconomic, hazardous or unnecessary use of floodplains for activities that impair the beneficial functions of such areas. Furthermore, state agencies, leading by example, can provide local government and the public with a model that allows for optimum floodplain management and the mitigation of existing flood hazards.

Therefore, I direct the Department of Environmental Quality ("DEQ"), as the lead agency, to develop a statewide, inter-agency, flood mitigation strategy to assure compliance with the State Flood Hazard Mitigation Plan. In many respects, this strategy will involve the implementation of aspects of the State Flood Hazard Mitigation Plan, which was originally developed pursuant to the provisions of Executive Order 1977-4 issued by Governor William G. Milliken. The Michigan Hazard Mitigation Coordinating Council, an entity created by Executive Order 1998-5, currently assists in the development, maintenance and implementation of the State Flood Hazard Mitigation Plan.

The DEQ shall develop this strategy in cooperation with the Department of State Police, the Department of Consumer and Industry Services ("CIS"), the Department of Management and Budget ("DMB"), the Department of Transportation, and the Michigan Hazard Mitigation Coordinating Council. Other state departments and agencies shall cooperate in the development of the strategy as requested by DEQ.

In addition to general provisions implementing the State Flood Hazard Mitigation Plan, the mitigation strategy shall specifically include the following:

1. A review of administrative rules promulgated by DEQ found in Part 13 – Floodplains and Floodways, of the DEQ's Water Resources Protection rules, located at R. 323.1311 et seq. of the Michigan Administrative Code. This review shall determine if current regulations adequately prevent state activities that cause the loss of water storage capacity in the state's floodplains. Additionally, the review shall determine if current regulations provide adequate flood resistant construction standards for state riverine and inland lake floodplain construction activities. The strategy shall recommend changes in the applicable regulations when necessary and appropriate to assure compliance with the State Flood Hazard Mitigation Plan.

- 2. A review of administrative rules promulgated by DEQ entitled Great Lakes Shorelands located at R. 281.21 et seq. of the Michigan Administrative Code. This review shall determine if current regulations include adequate measures to assure flood resistant construction standards apply to state construction activities in Great Lakes floodplains. The strategy shall recommend changes in the applicable regulations when necessary and appropriate to assure compliance with the State Flood Hazard Mitigation Plan.
- 3. A review of administrative rules promulgated by the Department of Consumer and Industry Services ("CIS") addressing Land Divisions (R. 560.101 et seq.), Condominium Development (R. 559.101 et seq.) and Mobile Home Park Development (R. 325.3311 et seq.). This review shall determine if current regulations include adequate measures to prevent state development that would cause the state to incur flood damages for floods up to and including a 100-year flood. The strategy shall recommend changes in the applicable regulations when necessary and appropriate to assure compliance with the State Flood Hazard Mitigation Plan.
- 4. A review of the provisions of the Single State Construction Code Act, Act No. 245 of the Public Acts of 1999, being Section 125.1501 et seq. of the Michigan Compiled Laws, and any administrative rules promulgated by CIS under the act (R. 408.30101 et seq.). This review shall determine if state development in floodplain areas complies with the provisions of the Act and the administrative rules adopted pursuant to the Act. The strategy shall recommend changes in the applicable regulations when necessary and appropriate to assure compliance with the State Flood Hazard Mitigation Plan.
- 5. The establishment of a coordination mechanism between DMB and DEQ to assure that the construction of buildings and other state facilities avoids the use of flood-prone lands whenever possible and to assure that new state facilities are designed to minimize potential flood damage when necessary and appropriate.
- 6. The preparation and implementation of an educational program for the general public and local units of government focusing on the need to reduce flood damages.

Flood damage prevention is of great importance to the safety, health and welfare of our citizens. I am confident that state departments and agencies can and will assist in the development of a more effective flood mitigation strategy and thereby minimize the likelihood that state property will be damaged during future flood events.

Thank you for your cooperation.

Attachment H (cont.):

STATE OF MICHIGAN Executive Office * Lansing

EXECUTIVE ORDER 1977-4 (ELECTRONIC COPY)

STATE FLOOD HAZARD MITIGATION PLAN

WHEREAS, uneconomic uses of the State's flood plains are occurring and potential flood losses are increasing; and

WHEREAS, the State has extensive and continuing programs for the construction and reconstruction of buildings, roads, and other facilities and annually disposes of hundreds of land parcels that may be flood prone, all of which activities significantly influence patterns of commercial, residential, and industrial development; and

WHEREAS, State land use planning programs are determining factors in the utilization of lands; and

WHEREAS, the Federal Flood Disaster Protection Act of 1973 (P. L. 93-234) and the National Flood Insurance Program requires a state management plan;

NOW, THEREFORE, I, WILLIAM G. MILLIKEN, Governor of the State of Michigan, pursuant to the authority vested in me by the Michigan Constitution, laws of the State of Michigan, and the applicable provisions of P. L. 93-234, hereby order the following:

- 1. The Department of Natural Resources, Water Management Division is hereby designated as the state agency to supervise and administer the state flood hazard management program. Requests for information or technical assistance to implement the provisions of this Order shall be directed to the Water Management Division.
- 2. The heads of the State agencies shall provide leadership in encouraging a broad and unified effort to prevent uneconomic uses and development of the State's flood plains and, in particular, to lessen the risk of flood losses in connection with State lands and installations and State financed or supported improvements.
- 3. To implement this mandate, it is hereby ordered that:
 - a) All State agencies directly responsible for the construction of State buildings, structures, roads, or other facilities shall evaluate flood hazards when planning the location of new facilities and, as far as practicable, shall preclude the uneconomic, hazardous, or unnecessary use of flood plains in connection with such facilities.
 - b) With respect to existing State owned properties which have suffered flood damage or which may be subject thereto, the responsible agency head shall require conspicuous delineation of past and probable flood heights so as to assist in creating public awareness of the knowledge about flood hazards. Whenever practical and economically feasible, flood proofing measures shall be applied to existing facilities in order to reduce flood damage potential.
 - c) All State agencies responsible for the disposal of State lands or properties shall evaluate flood hazards in connection with lands or properties proposed for disposal to non-State public

instrumentalities or private interests and, as may be desirable in order to minimize future public expenditures for flood protection and flood disaster relief and as far as practicable, shall attach appropriate restrictions with respect to uses of the lands or properties by the purchaser and his successors and may withhold such lands or properties from disposal.

- d) All State agencies responsible for programs which entail land use planning shall take flood hazards into account when evaluating plans and shall encourage land use appropriate to the degree of hazard involved.
- 4. All flood hazard evaluations shall be based upon a base flood that has a 1% chance of being equaled or exceeded in any given year, commonly known as a 100-year flood.
- 5. Proposals for new construction, substantial improvements or other developments or alteration within a flood hazard area shall be guided by the following standards:
 - a) Encroachments within the floodway of a stream that would result in any increase in flood stage shall be prohibited unless approved by the Department of Natural Resources.
 - b) All new construction and substantial improvements shall have the lowest floor (including basement) elevated to or above the base flood level. Non-residential construction may be designed with attendant utility and sanitary facilities so that below the base flood level, the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capacity of resisting hydrostatic and hydrodynamic loads and effects of buoyance. Any utilization of flood proofing techniques shall require a certification from a registered engineer or architect that the flood proofing methods are adequate to withstand the flood depths, hydrostatic pressures, velocities, impact, and uplift pressures associated with the base flood. All certificates indicating the elevation at mean sea level datum to which such structures are flood proofed shall be kept on record within the State agency responsible for the structure.
- 6. Requests for appropriations for State construction of new buildings, structures, roads, or other facilities shall be accompanied by a statement by the head of the agency on the findings of his agency's evaluation and consideration of flood hazards in the development of such requests. If the construction is in a flood prone area, the statement shall contain a letter of non-objection from the Department of Natural Resources.
- 7. The State agencies shall proceed immediately to develop such procedures, regulations, and information as are provided for in, or may be necessary to carry out, the provisions of this Order.

Given under my hand and the Great Seal of the State of Michigan this Thirteenth day of May in the Year of Our

	Lord, One Thousand Nine Hundred and Seventy-Seven and of the Commonwealth One Hundred Forty-One.
	(signed by William G. Milliken) GOVERNOR
BY THE GOVERNOR:	
(signed by Richard H. Austin)	

Secretary of State